

=> s bubble? and hydraulic motor and water

91590 BUBBLE?
172450 HYDRAULIC
416210 MOTOR
17358 HYDRAULIC MOTOR
(HYDRAULIC(W) MOTOR)

733859 WATER

L1 155 BUBBLE? AND HYDRAULIC MOTOR AND WATER

=> d 11 155

155. 3,604,139, Sep. 14, 1971, APPARATUS FOR SEINE PURSING AND METHOD FOR PURSING A SEINE THEREBY; Paul Strom, et al., 43/4.5, 8, 14 [IMAGE AVAILABLE]

=> d 11 1-155

1. 5,853,068, Dec. 29, 1998, Apparatus for exchange of automotive fluids; Patrick Lewis Dixon, et al., 184/1.5; 134/169A; 141/95, 98, 231, 331; 184/6.28, 6.4, 96, 104.3, 108 [IMAGE AVAILABLE]
2. 5,851,068, Dec. 22, 1998, Intermodal transportation of sedimentary substances; Robert M. Rumph, 366/348 [IMAGE AVAILABLE]
3. 5,832,969, Nov. 10, 1998, Fluid powered **bubble** machine with spill-proof capability; Michael R. Schramm, 141/98, 311A, 339; 446/20 [IMAGE AVAILABLE]
4. 5,803,665, Sep. 8, 1998, Method and apparatus for continuous production of quick-setting foamed cement grout with selectively adjustable proportions; Patrick J. Stephens, 405/146; 138/98; 405/132, 150.1, 154 [IMAGE AVAILABLE]
5. 5,803,596, Sep. 8, 1998, Method and apparatus for high capacity production of finished aqueous foam with continuously adjustable proportioning; Patrick J. Stephens, 366/10; 169/15; 261/27, DIG.26; 366/16, 51, 160.3 [IMAGE AVAILABLE]
6. 5,799,740, Sep. 1, 1998, Directional boring head with blade assembly; Brent G. Stephenson, et al., 175/62, 376 [IMAGE AVAILABLE]
7. 5,795,060, Aug. 18, 1998, Method and apparatus for continuous production of colloidally-mixed cement slurries and foamed cement grouts; Patrick J. Stephens, 366/2, 8, 10, 16, 20, 40, 51 [IMAGE AVAILABLE]
8. 5,794,734, Aug. 18, 1998, Method and apparatus for supplying driving energy to vehicle subassemblies; Ernst-Leo Fahl, et al., 180/165; 60/418; 180/53.8 [IMAGE AVAILABLE]
9. 5,775,103, Jul. 7, 1998, Apparatus for purifying a fluid by vacuum treatment; Hakan Ingvast, 60/453, 454, 488 [IMAGE AVAILABLE]
10. 5,766,313, Jun. 16, 1998, Hydrocarbon recovery system; Rodney T. Heath, 95/161, 163, 166, 169, 179, 227, 231; 96/182, 218, 242 [IMAGE AVAILABLE]

11. 5,720,834, Feb. 24, 1998, Method for covering a pipeline by wrapping; Robert Edward Steele, et al., 156/86, 162, 187, 272.2 [IMAGE AVAILABLE]
12. 5,720,438, Feb. 24, 1998, Mobile apparatus and process for treating infectious waste; Thomas J. Devine, et al., 241/21, 29, 606; 422/27 [IMAGE AVAILABLE]
13. 5,713,726, Feb. 3, 1998, Pump apparatus; Hideki Nakayoshi, 417/310, 292, 440; 418/161 [IMAGE AVAILABLE]
14. 5,709,536, Jan. 20, 1998, Hydro mechanical packingless pump and liquid spray system; Wesley E. Renfro, et al., 417/383; 137/454.4, 512; 417/362, 472 [IMAGE AVAILABLE]
15. 5,653,189, Aug. 5, 1997, Hydrofoil craft; Peter R. Payne, 114/274 [IMAGE AVAILABLE]
16. 5,651,316, Jul. 29, 1997, Retractable printing/coating unit operable on the plate and blanket cylinders simultaneously from the dampener side of the first printing unit or any consecutive printing unit of any rotary offset printing press; Howard W. DeMoore, et al., 101/450.1, 424.1; 118/46 [IMAGE AVAILABLE]
17. 5,632,195, May 27, 1997, Food processing apparatus with non-straight lifting and agitating baffles; David R. Zittel, 99/348, 404, 409, 443C, 516; 134/65, 132; 366/81, 234, 319 [IMAGE AVAILABLE]
18. 5,626,423, May 6, 1997, Apparatus and method for transporting and agitating a substance; Robert M. Rumph, 366/270, 191, 297 [IMAGE AVAILABLE]
19. 5,603,608, Feb. 18, 1997, Methods and apparatus for monitoring progressive cavity pumps; Horst F. Marz, 417/13; 277/320, 602, 907; 417/32; 418/48 [IMAGE AVAILABLE]
20. 5,598,777, Feb. 4, 1997, Retractable printing/coating unit operable on the plate and blanket cylinders; Howard W. DeMoore, et al., 101/177, 352.04 [IMAGE AVAILABLE]
21. 5,558,604, Sep. 24, 1996, Aquatic treadmill apparatus; Thomas H. Hopkins, 482/54, 111 [IMAGE AVAILABLE]
22. 5,466,385, Nov. 14, 1995, Gas sparged centrifugation method; Ernest E. Rogers, et al., 210/787; 55/459.1, 459.4; 210/221.2, 360.1, 380.1, 512.3; 494/43, 50 [IMAGE AVAILABLE]
23. 5,451,284, Sep. 19, 1995, Self-mobile work vehicle moveable through pipeline and method and apparatus for lining interconnecting branch pipe using the vehicle; Shintaro Ikeda, et al., 156/247; 138/97; 156/287, 294, 344, 423, 584; 405/154 [IMAGE AVAILABLE]
24. 5,425,617, Jun. 20, 1995, Constant static pressure runner in an axial flow turbine; Antonio A. Teran, 415/71, 72; 416/176 [IMAGE AVAILABLE]
25. 5,419,632, May 30, 1995, Method and apparatus for continuous mixing and injection of foamed cement grout; Patrick J. Stephens, 366/3, 51; 405/150.1, 267 [IMAGE AVAILABLE]
26. 5,392,868, Feb. 28, 1995, Directional multi-blade boring head; Arthur D. Deken, et al., 175/62, 376 [IMAGE AVAILABLE]
27. 5,387,342, Feb. 7, 1995, Centrifugal separator and method; Ernest E.

Rogers, et al., 210/512.3, 360.1, 380.1, 512.1, 787; 494/43, 50, 60
[IMAGE AVAILABLE]

28. 5,387,089, Feb. 7, 1995, Method and apparatus for compressing gases with a liquid system; John Stogner, et al., 417/54; 91/508; 417/339
[IMAGE AVAILABLE]

29. 5,375,669, Dec. 27, 1994, Method and apparatus for cleaning a borehole; Martin D. Cherrington, 175/53, 62, 69, 102, 215, 324 [IMAGE AVAILABLE]

30. 5,341,887, Aug. 30, 1994, Directional multi-blade boring head; Arthur D. Dekem, et al., 175/62, 376 [IMAGE AVAILABLE]

31. 5,328,250, Jul. 12, 1994, Self-propelled undersea nodule mining system; Ronald Upright, 299/8; 37/314; 299/9 [IMAGE AVAILABLE]

32. 5,316,712, May 31, 1994, Process for producing solid cosmetics; Atsushi Ono, et al., 264/102, 211.11, 297.8, 328.16, 328.18, 328.2, 328.8, 330; 425/803, DIG.32 [IMAGE AVAILABLE]

33. 5,262,608, Nov. 16, 1993, Underwater torch cutting and welding apparatus; Reino S. Mustonen, 219/72, 69.1 [IMAGE AVAILABLE]

34. 5,242,026, Sep. 7, 1993, Method of and apparatus for drilling a horizontal controlled borehole in the earth; Arthur D. Dekem, et al., 175/62, 19 [IMAGE AVAILABLE]

35. 5,203,359, Apr. 20, 1993, Unitary system for recycling used contaminated material for re-use; Robert H. Fesmire, et al., 134/61, 120, 159, 163 [IMAGE AVAILABLE]

36. 5,169,295, Dec. 8, 1992, Method and apparatus for compressing gases with a liquid system; John Stogner, et al., 417/339; 91/508 [IMAGE AVAILABLE]

37. 5,148,880, Sep. 22, 1992, Apparatus for drilling a horizontal controlled borehole in the earth; Douglas W. Lee, et al., 175/393, 73, 398, 400, 424 [IMAGE AVAILABLE]

38. 5,141,363, Aug. 25, 1992, Mobile train for backfilling tunnel liners with cement grout; Patrick J. Stephens, 405/150.1, 146, 150.2 [IMAGE AVAILABLE]

39. 5,133,882, Jul. 28, 1992, Barge mounted oil recovery and recycle system; Donald M. Stearns, 210/776, 221.1, 242.1, 703, 706, 923 [IMAGE AVAILABLE]

40. 5,132,025, Jul. 21, 1992, Oil well drilling mud and brine recycling system; Ricky A. Hays, 210/758; 166/265; 175/66, 206; 210/615, 705, 787, 804 [IMAGE AVAILABLE]

41. 5,089,120, Feb. 18, 1992, Treatment vessel for bodies of **water** with laterally adjustable pontoons; Thomas E. Eberhardt, 210/170; 114/124, 283; 210/198.1, 242.1; 239/142 [IMAGE AVAILABLE]

42. 5,060,703, Oct. 29, 1991, Apparatus for filling hydraulic systems; Arthur Koerner, 141/59, 65, 98; 188/352 [IMAGE AVAILABLE]

43. 5,048,693, Sep. 17, 1991, Method and apparatus for sorting articles with small density differences utilizing a flotation stream; Arthur Zaltzman, 209/137, 147, 157, 173, 474, 486, 488, 492, 493, 497, 502 [IMAGE AVAILABLE]

44. 5,042,137, Aug. 27, 1991, Dimpling and riveting method and

apparatus; Thomas H. Speller, Sr., 29/525.06, 524.1 [IMAGE AVAILABLE]

45. 5,038,523, Aug. 13, 1991, Seawater hydraulic rotary disk tool; Bruce Farber, et al., 451/344; 15/1.7, 29; 451/359 [IMAGE AVAILABLE]

46. 5,035,843, Jul. 30, 1991, Method for producing explosive substances; Herman Schmid, 264/3.2; 149/19.9, 46, 60, 76, 92, 93, 105, 109.6; 264/3.1, 3.4 [IMAGE AVAILABLE]

47. 4,977,966, Dec. 18, 1990, Seawater hydraulic rotary impact tool; Bruce Farber, et al., 173/159; 415/212.1 [IMAGE AVAILABLE]

48. 4,966,077, Oct. 30, 1990, Loading of boreholes with explosive; Pieter S. Halliday, et al., 102/313; 86/20.15; 102/312 [IMAGE AVAILABLE]

49. 4,965,062, Oct. 23, 1990, Hydrogen sulfide removal and sulfide recovery; Christiaan P. Van Dijk, et al., 423/576.7; 23/293S, 313FB; 95/179, 181; 96/218; 422/189; 423/576.4 [IMAGE AVAILABLE]

50. 4,953,638, Sep. 4, 1990, Method of and apparatus for drilling a horizontal controlled borehole in the earth; Richard P. Dunn, 175/61; 33/304; 175/45, 62, 73, 162, 220, 400 [IMAGE AVAILABLE]

51. 4,948,440, Aug. 14, 1990, Emulsion blasting agent preparation system; William E. Cribb, et al., 149/109.6, 2 [IMAGE AVAILABLE]

52. 4,918,766, Apr. 24, 1990, Hydrotherapy exercising device with scissor lift treadmill; Angelo Leonaggeo, Jr., 4/495, 494, 504; 5/611, 928; 119/674, 700; 482/4, 54 [IMAGE AVAILABLE]

53. 4,899,776, Feb. 13, 1990, Method and apparatus for emergency disconnection of a fluid petroleum product transfer arm; Eugene Le Devehat, 137/15; 15/3.51, 104.062; 137/615 [IMAGE AVAILABLE]

54. 4,898,066, Feb. 6, 1990, Polymeric film enveloped explosive cartridges and their manufacture and use; Horst F. Marz, 86/20.1; 102/324 [IMAGE AVAILABLE]

55. 4,885,591, Dec. 5, 1989, Method and apparatus for monitoring ice masses; Ronald D. Page, 342/450, 8, 9, 10, 41 [IMAGE AVAILABLE]

56. 4,885,098, Dec. 5, 1989, Sonic method for facilitating the removal of solid particles from a slurry; Albert G. Bodine, 210/702; 75/371; 210/747, 748; 266/101; 310/81; 366/118, 123, 124, 128, 600; 422/127, 269, 281; 423/1, 20, 27, 34, 50, 55, 65, 71, 85, 92, 101, 122, 140, 155, 184 [IMAGE AVAILABLE]

57. 4,884,985, Dec. 5, 1989, Elastically supported thruster structure; Arnfinn Dyrkorn, 440/52; 60/221; 114/151; 181/207 [IMAGE AVAILABLE]

58. 4,872,408, Oct. 10, 1989, Polymeric film-enveloped explosive cartridges and their manufacture and use; Horst F. Marz, 102/324, 282, 322, 331 [IMAGE AVAILABLE]

59. 4,865,722, Sep. 12, 1989, Method and apparatus for separation using fluidized bed; Max Ririe, et al., 209/474, 486, 492, 493, 498, 502 [IMAGE AVAILABLE]

60. 4,862,568, Sep. 5, 1989, Apparatus to drill and tap a hollow underwater member; Richard N. Wankmuller, et al., 29/26B; 405/211; 408/22, 137 [IMAGE AVAILABLE]

61. 4,858,289, Aug. 22, 1989, Dimpling and riveting apparatus; Thomas H. Speller, Sr., 29/34B, 243.53, 796; 227/61, 69, 99 [IMAGE AVAILABLE]

- 62. 4,849,237, Jul. 18, 1989, Method for sanitizing poultry carcasses in a poultry processing plant utilizing ozonated water; William D. Hurst, 426/332, 321, 474, 532, 644 [IMAGE AVAILABLE]
- 63. 4,824,285, Apr. 25, 1989, Apparatus and method for beach reclamation; Joseph C. Trierweiler, 405/17, 15, 16 [IMAGE AVAILABLE]
- 64. 4,821,936, Apr. 18, 1989, Hydraulic index drive system; Paul V. Osborn, 226/170; 60/487, 489; 226/95, 120, 139 [IMAGE AVAILABLE]
- 65. 4,802,349, Feb. 7, 1989, Horizontal bed power assist hide applicator; Carleton E. Jennrich, et al., 69/39, 19, 40, 45 [IMAGE AVAILABLE]
- 66. 4,783,004, Nov. 8, 1988, Ball drive sprinkler; James F. Lockwood, 239/205, 206, 240 [IMAGE AVAILABLE]
- 67. 4,781,140, Nov. 1, 1988, Apparatus for towing arrays of geophysical devices; Robert R. Bell, et al., 114/244, 245; 367/15 [IMAGE AVAILABLE]
- 68. 4,776,370, Oct. 11, 1988, Apparatus for securing a cable to a tubular pipe liner; Charles A. Long, Jr., 138/98, 109 [IMAGE AVAILABLE]
- 69. 4,774,855, Oct. 4, 1988, Apparatus for providing an electrical generator with a constant rotational speed from a variable speed input; Peter W. Murrell, et al., 475/31; 74/411, 720; 475/77 [IMAGE AVAILABLE]
- 70. 4,756,671, Jul. 12, 1988, Low damage hydraulic fish pumping system; Eldon L. Grimes, deceased, et al., 417/53; 43/4.5; 417/85, 90, 108, 405 [IMAGE AVAILABLE]
- 71. 4,747,466, May 31, 1988, Impact tool; Bill L. Jaworski, 181/120, 113; 367/83, 146 [IMAGE AVAILABLE]
- 72. 4,740,311, Apr. 26, 1988, Separating oil phase from aqueous phase using an apertured oleophilic sieve in contact with an apertured cylindrical cage wall; Jan Kruyer, 210/669, 401, 799 [IMAGE AVAILABLE]
- 73. 4,738,817, Apr. 19, 1988, Method for forming pharmaceutical capsules from hydrophilic polymers; Fritz Wittwer, et al., 264/328.14; 106/138.1, 156.24, 160.1; 524/24 [IMAGE AVAILABLE]
- 74. 4,738,724, Apr. 19, 1988, Method for forming pharmaceutical capsules from starch compositions; Fritz Wittwer, et al., 106/206.1; 264/328.1, 328.14, 328.15, 328.18 [IMAGE AVAILABLE]
- 75. 4,738,330, Apr. 19, 1988, Hydraulic drive system for use with vehicle power steering pump; Masahiko Suzuki, et al., 180/421; 60/443, 450; 123/41.12; 137/101, 115.04, 115.09; 180/423; 280/6.157 [IMAGE AVAILABLE]
- 76. 4,732,682, Mar. 22, 1988, Aeration apparatus and method; Ted R. Rymal, 210/620, 219, 220, 242.2, 629, 758; 261/87, 93, 120, DIG.75 [IMAGE AVAILABLE]
- 77. 4,726,315, Feb. 23, 1988, Apparatus for towing arrays of geophysical devices; Robert R. Bell, et al., 114/244, 254; 367/15 [IMAGE AVAILABLE]
- 78. 4,720,898, Jan. 26, 1988, Replacement of split pins in guide tubes; Raymond M. Calfo, et al., 29/33K, 705, 707, 711, 723; 376/260; 976/DIG.118 [IMAGE AVAILABLE]
- 79. 4,715,111, Dec. 29, 1987, Remote repair system for nuclear fuel rod assemblies; Anoop Kapoor, et al., 29/723, 402.08, 466, 467, 703, 720; 376/258, 262, 271, 463; 414/146, 745.2; 976/DIG.68, DIG.264 [IMAGE AVAILABLE]

• AVAILABLE]

80. 4,713,896, Dec. 22, 1987, Inshore submersible amphibious machines; Eric G. Jennens, 37/308, 309, 313; 56/9; 91/51; 114/312, 333, 337; 440/12.63 [IMAGE AVAILABLE]

81. 4,692,064, Sep. 8, 1987, Method to drill and tap a hollow underwater member; Richard N. Wankmuller, 405/211, 195.1, 216 [IMAGE AVAILABLE]

82. 4,687,139, Aug. 18, 1987, Ball drive sprinkler; James F. Lockwood, 239/205, 206, 240 [IMAGE AVAILABLE]

83. 4,685,983, Aug. 11, 1987, Method and apparatus for the installation of a liner within a conduit; Charles A. Long, Jr., 156/64, 156, 287, 294, 361, 423; 264/510; 427/238 [IMAGE AVAILABLE]

84. 4,685,414, Aug. 11, 1987, Coating printed sheets; Mark A. DiRico, 118/46, 211, 262 [IMAGE AVAILABLE]

85. 4,685,375, Aug. 11, 1987, Mix-delivery system for explosives; Cyrus A. Ross, et al., 86/20.15, 20.12; 149/2, 60, 109.6; 264/3.4 [IMAGE AVAILABLE]

86. 4,643,830, Feb. 17, 1987, Process for operating a total barrier oxidation ditch; John H. Reid, 210/629, 194, 219, 630, 903, 926; 588/205, 244, 246, 248 [IMAGE AVAILABLE]

87. 4,640,552, Feb. 3, 1987, Method and apparatus for splitting ice masses; Ronald D. Page, 299/24; 175/6, 17, 18, 65, 325.2; 405/61, 217 [IMAGE AVAILABLE]

88. 4,639,993, Feb. 3, 1987, Nuclear fuel rod loading fixture for use in a remote repair system; Anoop Kapoor, 29/428, 464, 559, 723; 376/261, 271, 463; 414/146, 745.2; 976/DIG.68, DIG.264 [IMAGE AVAILABLE]

89. 4,631,860, Dec. 30, 1986, Method for pre-germinating seeds; Robert I. Broughton, 47/58.1, DIG.9 [IMAGE AVAILABLE]

90. 4,629,432, Dec. 16, 1986, Elastically supported thruster structure; Arnfinn Dyrkorn, et al., 440/52; 114/151; 181/207; 248/631; 267/113; 440/70 [IMAGE AVAILABLE]

91. 4,621,946, Nov. 11, 1986, Method and apparatus for moving ice masses; Ronald D. Page, 405/61; 114/242; 405/211, 217; 440/33 [IMAGE AVAILABLE]

92. 4,616,719, Oct. 14, 1986, Casing lateral wells; Newton B. Dismukes, 175/94, 107 [IMAGE AVAILABLE]

93. 4,614,146, Sep. 30, 1986, Mix-delivery system for explosives; Cyrus A. Ross, et al., 366/40; 102/313; 149/109.6 [IMAGE AVAILABLE]

94. 4,578,784, Mar. 25, 1986, Tunable marine seismic source; Joseph F. Mifsud, 367/143; 181/110, 120; 367/189 [IMAGE AVAILABLE]

95. 4,577,547, Mar. 25, 1986, Impact tool; Bill L. Jaworski, 91/39, 417R [IMAGE AVAILABLE]

96. 4,535,714, Aug. 20, 1985, Rudder rotor for watercraft and floating equipment; Fred Petersen, 114/162, 144R; 244/10, 206; 416/4 [IMAGE AVAILABLE]

97. 4,526,239, Jul. 2, 1985, Underwater hydraulic tool; Hidehiko Kaneda, et al., 173/73, 69, 168, 171, DIG.1; 451/488 [IMAGE AVAILABLE]

98. 4,511,461, Apr. 16, 1985, Process for recovering minerals and metals by oleophilic adhesion; Jan Kruyer, 209/47, 49, 166, 168, 171, 272, 307; 210/783 [IMAGE AVAILABLE]

99. 4,505,638, Mar. 19, 1985, Underwater **hydraulic motor**; Kenji Sugino, et al., 415/113, 903 [IMAGE AVAILABLE]

100. 4,483,411, Nov. 20, 1984, Tunable marine seismic source; Joseph F. Mifsud, 181/120, 161, 402; 367/23, 143, 152 [IMAGE AVAILABLE]

101. 4,481,800, Nov. 13, 1984, Cold rolling mill for metal strip; Robert C. Ruhl, 72/11.4, 11.7, 13.1, 241.2, 245 [IMAGE AVAILABLE]

102. 4,461,660, Jul. 24, 1984, Bulk manufacture of emulsion explosives; Rejean Binet, et al., 149/2; 86/1.1, 20.1; 149/46, 109.6; 366/57 [IMAGE AVAILABLE]

103. 4,455,232, Jun. 19, 1984, Method and apparatus for induced-flow circulation and pressurized aeration in a barrier oxidation ditch; John H. Reid, 210/628, 194, 220, 629, 926; 261/93, DIG.75 [IMAGE AVAILABLE]

104. 4,422,990, Dec. 27, 1983, Method and apparatus for making soil plugs; Errol C. Armstrong, et al., 264/45.3; 47/74; 264/39, 334, 338; 425/93, 259, 261, 438, 817R [IMAGE AVAILABLE]

105. 4,397,106, Aug. 9, 1983, Dredge bucket wheel structure; Alexander W. K. McDowell, 37/329, 901 [IMAGE AVAILABLE]

106. 4,391,722, Jul. 5, 1983, **Water-based** low foam hydraulic fluid employing 2-ethylhexanol defoamer; Ellen S. Schwartz, et al., 252/73, 74, 75, 76, 77, 78.1; 508/583 [IMAGE AVAILABLE]

107. 4,382,746, May 10, 1983, Vortex turbine apparatus; Philip Retz, 415/202, 90 [IMAGE AVAILABLE]

108. 4,325,394, Apr. 20, 1982, Submersible motor chemical processing apparatus; Donald J. Reams, 134/141, 149, 902; 418/232 [IMAGE AVAILABLE]

109. 4,314,521, Feb. 9, 1982, Method and apparatus in the treatment of underwater surfaces of fixed or floating constructions; Hans G. Lundberg, 114/222; 15/1.7; 134/167R; 219/72; 228/18 [IMAGE AVAILABLE]

110. 4,306,413, Dec. 22, 1981, Hydraulic power and control system; Frederic H. Middleton, 60/478, 484; 91/529; 114/48, 322 [IMAGE AVAILABLE]

111. 4,305,214, Dec. 15, 1981, In-line centrifugal pump; George P. Hurst, 37/331, 195, 334; 415/52.1, 196, 203, 224; 417/205 [IMAGE AVAILABLE]

112. 4,268,398, May 19, 1981, Sludge agitating method; William D. Shuck, et al., 111/101; 210/170, 220, 221.2, 242.2; 261/77, 120, 121.1 [IMAGE AVAILABLE]

113. 4,236,995, Dec. 2, 1980, Process for recovering bitumen from tar sand; Jan Kruyer, 208/391, 425; 209/5, 17 [IMAGE AVAILABLE]

114. 4,199,262, Apr. 22, 1980, Bulk explosive mixing and delivery apparatus; William E. Cribb, et al., 366/44, 51, 184, 336 [IMAGE AVAILABLE]

115. 4,198,167, Apr. 15, 1980, Automatic tempura batter mixer; Douglas O. Deal, et al., 366/152.2, 153.1, 184, 288, 309 [IMAGE AVAILABLE]

116. 4,191,479, Mar. 4, 1980, Sludge agitating apparatus; William D. Shuck, et al., 366/101; 114/264; 261/77, 120, 121.1 [IMAGE AVAILABLE]

117. 4,188,918, Feb. 19, 1980, Internal combustion engine having inducted charge control means driven by engine through variable speed hydraulic transmission; Urban G. Robbins, Jr., 123/25R, 561 [IMAGE AVAILABLE]

118. 4,159,715, Jul. 3, 1979, Liquid treatment apparatus for body care; Philippe G. E. Woog, et al., 601/162 [IMAGE AVAILABLE]

119. 4,158,597, Jun. 19, 1979, Bleaching tower for gas phase bleaching; Bengt E. Pettersson, 162/238; 68/181R; 162/246 [IMAGE AVAILABLE]

120. 4,146,982, Apr. 3, 1979, Improved pump-type sludge dredging apparatus; Makoto Norisugi, 37/310, 326, 334 [IMAGE AVAILABLE]

121. 4,146,020, Mar. 27, 1979, Power handle for hydraulic toothbrush-spray appliance; Michel A. Moret, et al., 601/96; 15/22.1; 601/139, 160, 162 [IMAGE AVAILABLE]

122. 4,144,936, Mar. 20, 1979, Down hole milling or grinding system; Robert F. Evans, 166/298, 55.7, 65.1; 204/212; 205/663 [IMAGE AVAILABLE]

123. 4,134,426, Jan. 16, 1979, Seawater **hydraulic motor** distributing valve based on a hydrosphere bearing; Earl J. Beck, 137/625.23; 251/315.03, 315.16 [IMAGE AVAILABLE]

124. 4,105,494, Aug. 8, 1978, Process of gas-phase bleaching high consistency finely disintegrated pulp; Bengt E. Pettersson, 162/19, 49, 52, 63, 65 [IMAGE AVAILABLE]

125. 4,085,002, Apr. 18, 1978, Bleaching tower for gas phase bleaching; Bengt Edvard Pettersson, 162/238; 68/181R; 162/246 [IMAGE AVAILABLE]

126. 4,047,571, Sep. 13, 1977, Automatic fire extinguishing system for a building having central air conditioning; Guy Chaintrier, et al., 169/60; 62/180; 169/15 [IMAGE AVAILABLE]

127. 4,040,669, Aug. 9, 1977, Self propelled excavating vehicle; Wesley D. Franklin, 299/56, 22, 67 [IMAGE AVAILABLE]

128. 4,033,281, Jul. 5, 1977, Extra heavy duty hydrostatic anchor together with its extra heavy duty tether cable; Roy W. Lundh, 114/295 [IMAGE AVAILABLE]

129. RE 29,265, Jun. 14, 1977, Closed cell foam plastic molding machine; James W. Hendry, 425/147; 264/328.16, DIG.83; 425/561, 817R [IMAGE AVAILABLE]

130. 4,021,344, May 3, 1977, Oil pick up device; Michael Guthrie Webb, 210/122, 242.3, 776, 923 [IMAGE AVAILABLE]

131. 4,018,973, Apr. 19, 1977, Furnace construction for plasma arc remelting of metal; Boris Evgenievich Paton, et al., 373/18, 21 [IMAGE AVAILABLE]

132. 4,008,858, Feb. 22, 1977, Treating device for synthetic resin waste; Masatora Yamada, et al., 241/101.2, 67, 247, 261.1 [IMAGE AVAILABLE]

133. 4,004,642, Jan. 25, 1977, Tround terra-drill processes and apparatus; David Dardick, 175/4.5; 89/26; 175/93, 102, 106, 107 [IMAGE AVAILABLE]

134. 3,992,292, Nov. 16, 1976, Moving belt-type oil skimmer with propulsion induced flow, method and apparatus; Eldon L. Grimes, et al.,

210/671, 242.4, 693 [IMAGE AVAILABLE]

135. 3,987,537, Oct. 26, 1976, Method and apparatus for hydrophone streamer manufacture; Noel Macon Warren, 29/592.1, 241, 407.05, 433, 801; 254/134.3FT, 134.3R [IMAGE AVAILABLE]

136. 3,980,802, Sep. 14, 1976, Method of arc control in plasma arc furnace torches; Boris Evgenievich Paton, et al., 373/18; 219/121.36; 373/21 [IMAGE AVAILABLE]

137. 3,962,387, Jun. 8, 1976, Method of injection molding a foamable thermoplastic material; James W. Hendry, 264/50, 328.14, 349, DIG.5, DIG.83 [IMAGE AVAILABLE]

138. 3,899,033, Aug. 12, 1975, Pneumatic-kinetic drilling system; Allen T. Van Huisen, 175/97, 69, 103, 106, 107, 170 [IMAGE AVAILABLE]

139. 3,885,286, May 27, 1975, STREAMER MANUFACTURE; A. C. Hill, 29/745; 15/104.061; 29/241, 433, 801, 896.2; 367/20 [IMAGE AVAILABLE]

140. 3,882,800, May 13, 1975, Automotive unit for the collection and incineration of household or industrial refuse; Michel G. J. du Chambon, 110/212, 119, 215, 216, 240, 246 [IMAGE AVAILABLE]

141. 3,879,155, Apr. 22, 1975, Closed cell foam plastic molding apparatus; James W. Hendry, 425/4C; 264/50; 425/203, 817C [IMAGE AVAILABLE]

142. 3,877,520, Apr. 15, 1975, SUBSEA COMPLETION AND REWORK SYSTEM FOR DEEP WATER OIL WELLS; Paul S. Putnam, 166/366 [IMAGE AVAILABLE]

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Frank H. Langenfeld, 252/79, 76, 389.2; 508/485, 492, 493 [IMAGE
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AVAILABLE]

LITIGATION SEARCH FOR LINDA SHOLL: US 5,908,057 (reissue 09/867,320)

Files searched in QUESTEL ORBIT:

Selected cluster : LEGAL
Databases : LGST, CRXX, PAST, LITA
?us5908057/pn

Term not in index/PN-CRXX : US5908057

Term not in index/PN-PAST : US5908057

Term not in index/PN-LITA : US5908057

LGST	1
CRXX	0
PAST	0
LITA	0

1/1 LGST (1/1) - (C) LEGSTAT
PN - US 5908057 [US5908057]
AP - US 21617/98 19980210 [1998US-0021617]
DT - US-P
ACT - 19980210 US/AE-A
APPLICATION DATA (PATENT)
{US 21617/98 19980210 [1998US-0021617]}
- 19990601 US/A
PATENT
UP - 1999-27

Files searched in LEXIS and NEXIS:

All patent files

PATNO IS 5908057

Your search request has found 1 PATENT through Level 1.

LEVEL 1 - 1 OF 1 PATENT

<5,908,057>

<<=2>> GET 1st DRAWING SHEET OF 11

Jun. 1, 1999

Fluid powered bubble machine with spill-proof capability

CORE TERMS: bubble, impeller, container, fluid, housing, axle, cavity, cylinder, hollow, machine...

>>>

File searched: CASES

Your search request has found no CASES.

File searched: JOURNALS

Your search request has found no ITEMS.

File searched: NEWS STORIES

Your search request has found no STORIES.

File searched in DIALOG:

File 345:Inpadoc/Fam.& Legal Stat 1968-2001/UD=200130
(c) 2001 EPO
S1 1 PN="US 5908057"

1/39/1

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat
(c) 2001 EPO. All rts. reserv.

13843832

Basic Patent (No,Kind,Date): US 5246046 A 19930921 <No. of Patents: 007>

Patent Family:

Patent No	Kind	Date	Appli No	Kind	Date
AU 9654206	A1	19970916	AU 9654206	A	19960229
US 5246046	A	19930921	US 828345	A	19920130 (BASIC)
US 5495876	A	19960305	US 86541	A	19930701
US 5832969	A	19981110	US 608854	A	19960229
US 5908057	A	19990601	US 21617	A	19980210
US RE36131	E	19990309	US 531768	A	19950921
WO 9731690	A1	19970904	WO 96US3192	A	19960229

Priority Data (No,Kind,Date):

WO 96US3192 W 19960229
US 828345 A 19920130
US 86541 A 19930701
US 828345 A1 19920130
US 608854 A 19960229
US 86541 A2 19930701
US 828345 A2 19920130
US 21617 A 19980210
US 608854 A1 19960229
US 531768 A 19950921
US 828345 A5 19920130
WO 96US3192 A 19960229

PATENT FAMILY:

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 9654206 A1 19970916
SPILL-PROOF BUBBLE MACHINE (English)
Patent Assignee: MICHAEL R SCHRAMM
Author (Inventor): SCHRAMM MICHAEL R
Priority (No,Kind,Date): WO 96US3192 W 19960229
Appli (No,Kind,Date): AU 9654206 A 19960229
IPC: * A63H-033/28
Derwent WPI Acc No: * G 96-150367
Language of Document: English

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5246046 A 19930921
SPILL-RESISTANT BUBBLE SOLUTION CONTAINER (English)

Patent Assignee: SCHRAMM MICHAEL R (US)
Author (Inventor): SCHRAMM MICHAEL R (US)
Priority (No,Kind,Date): US 828345 A 19920130
Applic (No,Kind,Date): US 828345 A 19920130
National Class: * 141098000; 141311000A; 141333000; 141339000;
446020000; 220719000
IPC: * B65B-001/04; B65B-003/04
Derwent WPI Acc No: ; G 93-311271
Language of Document: English
Patent (No,Kind,Date): US 5495876 A 19960305
SPILL-PROOF BUBBLE MACHINE (English)
Patent Assignee: SCHRAMM MICHAEL R (US)
Author (Inventor): SCHRAMM MICHAEL R (US)
Priority (No,Kind,Date): US 86541 A 19930701; US 828345 A1
19920130; WO 96US3192 W 19960229
Applic (No,Kind,Date): US 86541 A 19930701
Addnl Info: 5246046 Patented
National Class: * 141098000; 141339000; 446020000
IPC: * B65B-001/04; B65B-003/04
Derwent WPI Acc No: * G 96-150367; G 96-150367
Language of Document: English
Patent (No,Kind,Date): US 5832969 A 19981110
FLUID POWERED BUBBLE MACHINE WITH SPILL-PROOF CAPABILITY (English)
Patent Assignee: SCHRAMM MICHAEL R (US)
Author (Inventor): SCHRAMM MICHAEL R (US)
Priority (No,Kind,Date): US 608854 A 19960229; US 86541 A2
19930701; US 828345 A2 19920130
Applic (No,Kind,Date): US 608854 A 19960229
Addnl Info: 5495876 19960305 Patented; 5246046 19930921 Patented
National Class: * 141098000; 141339000; 141311000A; 446020000
IPC: * B65B-001/04
Derwent WPI Acc No: ; G 99-008214
Language of Document: English
Patent (No,Kind,Date): US 5908057 A 19990601
FLUID POWERED BUBBLE MACHINE WITH SPILL-PROOF CAPABILITY (English)
Patent Assignee: SCHRAMM MICHAEL R (US)
Author (Inventor): SCHRAMM MICHAEL R (US)
Priority (No,Kind,Date): US 21617 A 19980210; US 608854 A1
19960229; US 86541 A2 19930701; US 828345 A2 19920130
Applic (No,Kind,Date): US 21617 A 19980210
Addnl Info: 5495876 19960305 Patented; 5246046 19930921 Patented
National Class: * 141098000; 141339000; 141311000A; 446020000
IPC: * B65B-001/04
Derwent WPI Acc No: * G 93-311271; G 96-150367; G 99-008214; G
99-346798; G 99-346798
Language of Document: English
Patent (No,Kind,Date): US RE36131 E 19990309
SPILL-RESISTANT BUBBLE SOLUTION CONTAINER (English)
Patent Assignee: SCHRAMM MICHAEL R (US)
Author (Inventor): SCHRAMM MICHAEL R (US)
Priority (No,Kind,Date): US 531768 A 19950921; US 828345 A5
19920130
Applic (No,Kind,Date): US 531768 A 19950921
Addnl Info: 5246046 19930921 Reissue of
National Class: * 141098000; 141311000A; 141333000; 141339000;
446020000; 220719000
IPC: * B65B-001/04; B65B-003/04

Derwent WPI Acc No: * G 93-311271; G 96-150367; G 99-008214; G

99-346798

Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 36131	E	19920130	US AA	PRIORITY
		US 828345	A5	19920130
US 36131	E	19950921	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 531768	A	19950921
US 36131	E	19990309	US E	REISSUE
US 5246046	P	19920130	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 828345	A	19920130
US 5246046	P	19930921	US A	PATENT
US 5246046	P	19960521	US RF	REISSUE APPLICATION FILED
		(REISSUE APPL. FILED)		
		950921		
US 5495876	P	19920130	US AA	PRIORITY
		US 828345	A1	19920130
US 5495876	P	19930701	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 86541	A	19930701
US 5495876	P	19960229	US AA	PCT-APPLICATION (PCT-APPL.)
		WO 96US3192	W	19960229
US 5495876	P	19960305	US A	PATENT
US 5832969	P	19920130	US AA	PRIORITY
		US 828345	A2	19920130
US 5832969	P	19930701	US AA	PRIORITY
		US 86541	A2	19930701
US 5832969	P	19960229	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 608854	A	19960229
US 5832969	P	19981110	US A	PATENT
US 5908057	P	19920130	US AA	PRIORITY
		US 828345	A2	19920130
US 5908057	P	19930701	US AA	PRIORITY
		US 86541	A2	19930701
US 5908057	P	19960229	US AA	PRIORITY
		US 608854	A1	19960229
US 5908057	P	19980210	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 21617	A	19980210
US 5908057	P	19990601	US A	PATENT

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No,Kind,Date): WO 9731690 A1 19970904

SPILL-PROOF BUBBLE MACHINE (English)

Patent Assignee: SCHRAMM MICHAEL R (US)

Author (Inventor): SCHRAMM MICHAEL R (US)

Priority (No,Kind,Date): WO 96US3192 A 19960229; US 86541 A 19930701; US 828345 A 19920130

Applic (No,Kind,Date): WO 96US3192 A 19960229

Designated States: (National) AL; AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE; ES; FI; GB; GE; HU; IS; JP; KE; KG; KP; KR; KZ;

LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO;
RU; SD; SE; SG; SI; SK; TJ; TM; TR; TT; UA; UG; UZ; VN (Regional)
AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
Filing Details: WO 100000 With international search report
IPC: * A63H-033/28
Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Legal Status (No,Type,Date,Code,Text):

WO 9731690 P 19920130 WO AA PRIORITY (PATENT)
US 828345 A 19920130
WO 9731690 P 19930701 WO AA PRIORITY (PATENT)
US 86541 A 19930701
WO 9731690 P 19960229 WO AE APPLICATION DATA (APPL.
DATA)
WO 96US3192 A 19960229
WO 9731690 P 19970904 WO AK DESIGNATED STATES CITED IN A
PUBLISHED APPLICATION WITH SEARCH REPORT
(DESIGNATED STATES CITED IN A PUBLISHED APPL.
WITH SEARCH REPORT)
AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE
ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS
LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK TJ TM TR TT UA UG UZ VN
WO 9731690 P 19970904 WO AL DESIGNATED COUNTRIES FOR
REGIONAL PATENTS CITED IN A PUBLISHED
APPLICATION WITH SEARCH REPORT (DESIGNATED
COUNTRIES FOR REGIONAL PATENTS CITED IN A
PUBLISHED APPL. WITH SEARCH REPORT)
AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT
SE
WO 9731690 P 19970904 WO A1 PUBLICATION OF THE
INTERNATIONAL APPLICATION WITH THE
INTERNATIONAL SEARCH REPORT (PUB. OF THE
INTERNATIONAL APPL. WITH THE INTERNATIONAL
SEARCH REPORT)
WO 9731690 P 19971126 WO 121 EP: PCT APP. ART. 158 (1)
(EP: PCT ANM. ART. 158 (1))
WO 9731690 P 19980702 DE 8642/REG WITHDRAWAL (ZURUECKNAHME)
WO 9731690 P 19980904 WO NENP NON-ENTRY INTO THE NATIONAL
PHASE IN:
JP 97530903
WO 9731690 P 19981029 WO NENP NON-ENTRY INTO THE NATIONAL
PHASE IN:
CA
WO 9731690 P 19991013 WO 122 EP: PCT APP. NOT ENT. EUROP.
PHASE (EP: PCT ANM. NICHT IN EUROP. PHASE
EING.)

END LITIGATION SEARCH US 5,908,057
